Dissecting Idiosyncratic Income Risk

Elin Halvorsen†  Hans A. Holter‡  Serdar Ozkan§
Kjetil Storesletten¶

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Abstract

The distribution of earnings risk has gotten much attention in recent literature
and it has been documented that it displays pronounced non-Gaussian features
as well as asymmetric mean reversion. In this paper we study the determinants of
earnings risk as well as the insurance against it, using Norwegian Registry
data. In the first part of the paper we decompose earnings risk into changes in hours
and changes in wage rates and study their contributions to earnings dynamics and
we study the life-events associated with large earnings changes. We find that for
high-earners large earnings changes are mostly driven by changes in wages, and
that hours are more important for workers with low earnings. For hours, negative
changes are transitory and positive changes are persistent. Wage shocks are persis-
tent except at the top of the earnings distribution. Like earnings changes, wage and
hours changes are also left-skewed and leptokurtic with magnitudes and patterns
similar to those of earnings growth. However, co-movement between the two is the
largest driver of the earnings growth distribution. The negative skewness and high
kurtosis of earnings shocks are driven by job-stayers and closely connected to sick-
ness. In the second part of the paper we study insurance against earnings shocks.
We ask to what degree individual earnings shocks are transmitted to household
labor income, household disposable income and ultimately to consumption. We
find that spouses provide significant insurance but do not change their earnings as
a response to changes in their husband’s income. Furthermore the redistributive
Norwegian public insurance system reduces household income and consumption
risk significantly but much more so for low-income families. Thus, we also find
a less pronounced left skewness and excess kurtosis in the household disposable
income growth distribution.

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Keywords: Earnings dynamics, Income shocks, Insurance, Wages, Hours, Higher-
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†Statistics Norway; elin.halvorsen@ssb.no; www.ssb.no/en/forskning/ansatte/elin-halvorsen
‡University of Oslo; hans.holter@econ.uio.no; https://sites.google.com/site/hansaholter/
§University of Toronto; serdar.ozkan@utoronto.ca; www.serdarozkan.me
¶University of Oslo; kjetil.storesletten@econ.uio.no; http://folk.uio.no/kjstore/